

# RAYMER

## INSTRUCTION MANUAL

### MODEL 183 FM TUNER

#### INSTALLATION AND OPERATION INSTRUCTIONS

Model 183 is a High Fidelity ultra-sensitive FM tuner complete with AFC and should be used in connection with a high-grade high-fidelity audio amplifier. The Tuner has an audio output jack and an additional jack for attachment to a Multiplex Converter. A socket is also provided for RAYMER Model 184 plug-in adapter when electronic squelch is desired.

#### UNPACKING:

The unit is to be removed carefully from the carton and inspected for any possible damage in transit. If there is any evidence of any damage which might have occurred in shipment, notify your dealer at once, or the transportation company which delivered it. Claims for damage sustained in transit must be made upon the Carrier. Save all packing material for inspection by the claim agent who will furnish you with the proper forms and will also give you the necessary instructions for filing a claim. In addition to the Unit, there should be included in the carton the following:

1. INSTRUCTION BOOKLET
2. WARRANTY CARD

To insure proper servicing and to protect your rights under the warranty, be sure to fill in the warranty registration card without delay and mail to the factory.

#### WARRANTY

This unit has been very carefully inspected and tested at the factory and normally should require no service other than a semi-annual check of the tubes. Each unit is warranted to be free from defects in material and workmanship under normal use and service for a period of 90 days from date of delivery to the original purchaser. If any unit appears to be defective, the factory will repair any unit returned within said 90 days, providing all transportation charges are pre-paid, and which our examination shall disclose to our satisfaction to be defective.

This Warranty does not include free labor, nor is it applicable to any unit which shall have been subject to accident, tampered with, mis-used, abused, or altered in any manner whatsoever. Further, this Warranty shall not apply to any unit which has been connected improperly.

It is recommended that any unit on which service is required, be processed through your dealer wherever possible.

This Warranty is expressly in lieu of all other Warranties, expressed or implied, and of all other obligations or liabilities on our part. We neither assume nor authorize any other person to assume for us any other liability in connection with the products manufactured by Trutone Electronics, Inc.

#### INSTALLATION

Because of its attractive appearance, the Tuner may be placed on a table or a bookshelf. If installed in a cabinet, the cover is to be removed, and ample ventilation must be allowed. Model 183 Tuner is designed to operate on a 110 to 120 volt, 60 cycle A.C. line.

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14660 Raymer St. • Van Nuys, Calif.

All connections are provided on the rear of the unit. One end of a proper patch cord is to be connected into the audio jack and the other end inserted in the input jack of the audio amplifier, which is usually designated as a "Radio" or "Tuner". The Multiplex jack can be used for connecting to a Multiplex Converter to receive simultaneous signals on both FM and Multiplex broadcast, and for Multiplex Stereo Reception. The unit may be plugged either in the rear of the amplifier or in the event the amplifier does not have an A.C. receptacle, insert in any 110 volt A.C. outlet.

An AC receptacle is supplied on the rear panel of the chassis. In background music installations where it is desired to turn off both the tuner and the amplifier from the tuner, the amplifier should be plugged into the tuner receptacle so that the On-Off switch of the Tuner will control both units simultaneously.

The front of the Tuner has four operating controls: the slide switch at the lower left is to turn the set on by placing the switch to the "ON" position; the slide switch at the lower right is for AFC defeat; the knob at the right is used to tune the desired station; the knob at the left is for volume control.

An electronic squelch circuit in plug-in form is available for the Model 183 Tuner. (RAYMER Model 184.) The squelch circuit is designed to silence commercials from those FM stations providing supersonic carriers for this purpose. When the squelch plug-in unit is inserted in the octal socket on the chassis, the slide switch on the rear panel is employed for the elimination of the squelch function when the Tuner is used for any station not employing the supersonic carrier. The use of this switch avoids any possible program interference.

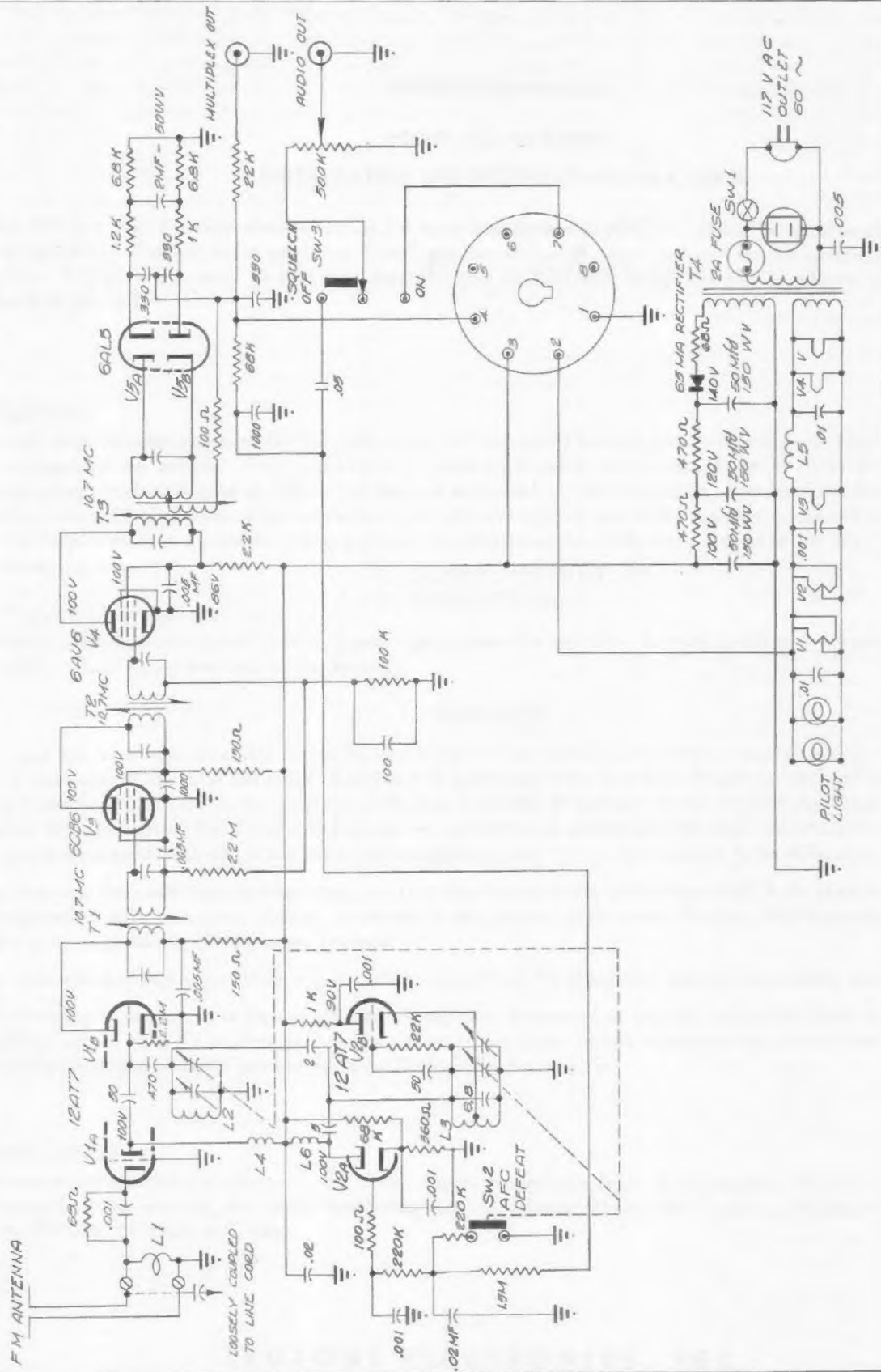
AFC refers to "Automatic Frequency Control", and is an electronic means of keeping the receiver properly tuned to the FM broadcasting station. Even if the Tuner pointer is not in the exact center of the channel, the AFC will automatically pull in the signal to the proper point. However, in tuning in a weak station adjacent to a stronger one, if the AFC is in operation position, it may "lock on the stronger signal". It is for this reason that a means has been provided for disabling the AFC. This is accomplished by using the right hand slide switch as indicated below.

For normal operation, the AFC slide switch should be placed at the "ON" position. For very precise tuning or for tuning a weak station next to a powerful station on FM, it is suggested that this switch be placed in the "OFF" position until the station is received the loudest. The switch is then to be moved to the "ON" position and the station will be properly tuned and locked in position.

For normal F.M. reception, a built-in line cord antenna is sufficient for most locations. In the event that the unit is located in a remote area, an external Dipole antenna will increase the efficiency and a number of distant stations can then be received. This external antenna is to be connected across the terminals marked "ANT" and "GND".

The lower marking on the dial glass is a "LOG" scale for easy recording of the position of the pointer for any specific station.





1. VOLTAGES TAKEN WITH VACUUM TUBE VOLTMETER  
2. ALL VOLTAGES TAKEN WITH NO SIGNAL INPUT  
3. RESISTORS:  $J_L = \text{OHMS}$ ;  $K = \text{KILOHMS}$ ;  $M = \text{MEG OHMS}$   
4. ALL CAPACITORS IN MMF UNLESS OTHERWISE NOTED  
5.

TRUTONE ELECTRONICS INC  
LOS ANGELES CALIFORNIA

MODEL N9 189 TUNER FM

117 VOLTS AC 60 ~ 29 WATTS

ENGINEER: HENRY COHEN	DATE: 3-4-61
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APPROVAL: *(Signature)* DRAFT: W. REGENELER

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